

REMARKS

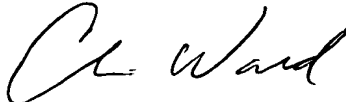
Favorable consideration of this application as presently amended is respectfully requested.

Claims 1-9, 11-20, and 23-93 are presently active in this case, Claims 1, 11, 12, 15, 23-26, 35, 45, 47, 54, 72, 73, and 78 having been amended and Claims 10, 21, and 22 having been canceled by way of the present Preliminary Amendment.

The present application is believed to be in condition for formal allowance and an early and favorable consideration of this application is therefore requested.

Respectfully submitted,

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IN THE CLAIMS

Claims 10, 21, and 22 have been canceled without prejudice or disclaimer.

Claims 1, 11, 12, 15, 23-26, 35, 45, 47, 54, 72, 73, and 78 are amended as follows:

1. (Once Amended) An ink cartridge configured to be detachably attached to a printer, said ink cartridge comprising:

an ink reservoir in which an ink used for printing is kept; and

a storage unit storing specific information in a readable, writable, and non-volatile manner, [the storage unit having an ink quantity information storage area] wherein the specific information comprises an ink quantity-relating information relating to a quantity of ink kept in said ink reservoir,

wherein the storage unit is sequentially accessed in synchronism with a clock signal, and has an ink quantity information storage area storing the ink quantity-relating information, and wherein the ink quantity information storage area is located at a specific area accessed first by said printer

[wherein the specific information comprises information relating to a quantity of ink kept in said ink reservoir, and wherein the ink quantity information storage area is included in a specific area written first by said printer and stores in which the ink quantity-relating information].

10. (Cancel)

11. (Once Amended) An ink cartridge in accordance with [claim 10] any one of claims 1 through 9, wherein said storage unit has a plurality of storage areas, and

the ink quantity information storage area is a first storage area located at a head of the plurality of storage areas included in said storage unit.

12. (Once Amended) An ink cartridge in accordance with [claim 10] any one of claims 1 through 9, wherein said storage unit has a plurality of storage areas,

the ink quantity information storage area is a last storage area located at an end of the plurality of storage areas included in said storage unit.

15. (Once Amended) An ink cartridge configured to be detachably attached to a printer, said ink cartridge comprising:

an ink reservoir in which an ink used for printing is kept; and

a storage unit storing specific information in a readable, writable, and non-volatile manner and being sequentially accessed in synchronism with a clock signal, said storage unit having a first storage area, in which a plurality of read only information is stored, and a second storage area, which is arranged at a location accessed prior to the first storage area and in which rewritable information is stored,

wherein the specific information comprises information relating to a quantity of ink kept in said ink reservoir.

21. (Cancel)

22. (Cancel)

23. (Once Amended) An ink cartridge in accordance with [claim 22] any one of claims 1 through 9 and 15 through 20, wherein said storage unit is an EEPROM.

24. (Once Amended) An ink cartridge in accordance with [claim 1] any one of claims 1 through 9 and 15 through 20, wherein said storage unit has format information relating to items of information stored therein.

25. (Once Amended) An ink cartridge in accordance with claim 24, wherein the format information is registered in a head area of said storage unit.

26. (Once Amended) An ink cartridge configured to be detachably attached to a printer, said ink cartridge comprising:

an ink reservoir in which an ink used for printing is kept; and

a storage unit having a plurality of ink quantity information memory divisions and a plurality of write complete information storage areas, and the storage unit storing specific information in a readable, writable, non-volatile manner,

wherein the specific information comprises information relating to a quantity of ink kept in said ink reservoir, wherein the plurality of ink quantity information memory divisions store the ink quantity-relating information, and wherein the plurality of write complete information storage areas respectively correspond to the plurality of ink quantity information memory divisions and in each of which write complete information is registered when a writing operation into the corresponding ink quantity information memory division is completed.

35. (Once Amended) A method of writing plural pieces of specific information into an ink cartridge, said ink cartridge being configured to be detachably attached to a printer and having a storage element, said method comprising the steps of:

(a) providing the plural pieces of specific information that are to be written into said storage element by said printer, wherein the plural pieces of specific information comprises information relating to a quantity of ink kept in said ink cartridge; and

(b) writing the ink quantity-relating information into said storage element, preferentially over the other pieces of specific information.

45. (Once Amended) A method of writing specific information into an ink cartridge, said ink cartridge being configured to be detachably attached to a printer and having a storage element, said method comprising the steps of:

(a) providing the specific information that is to be written into said storage element by said printer, the specific information comprising information relating to a quantity of ink kept in said ink cartridge;

(b) writing the ink quantity-relating information into a plurality of ink quantity information memory divisions, which are included in said storage element; and

(c) writing write complete information into a write complete information storage area when the writing operation of the ink quantity-relating information into each of the ink quantity information memory divisions has been completed, wherein the write complete information storage area is provided corresponding to each of the ink quantity information memory divisions in said storage element[.,].

47. (Once Amended) A method of writing specific information into an ink cartridge, said ink cartridge being configured to be detachably attached to a printer and having a storage element, said method comprising the steps of:

(a) providing the specific information that is to be written into said storage element by said printer, the specific information comprising information relating to a quantity of ink kept in said ink cartridge;

(b) writing first ink quantity-relating information into a first ink quantity information memory division, which is included in said storage element;

(c) writing first write complete information into a first write complete information storage area when the writing operation of the first ink quantity-relating information into the first ink quantity information memory division has been completed, wherein the first write complete information storage area is provided corresponding to the first ink quantity information memory division in said storage element;

(d) writing second ink quantity-relating information into a second ink quantity information memory division after the writing operation of the first write complete information into the first write complete information storage area has been completed, wherein the second ink quantity information memory division is included in said storage element; and

(e) writing second write complete information into a second write complete information storage area when the writing operation of the second ink quantity-relating information into the second ink quantity information memory division has been completed, wherein the second write complete information storage area is provided corresponding to the second ink quantity information memory division in said storage element.

54. (Once Amended) A printer, to which an ink cartridge in accordance with any one of [claims 1 through 25] claims 1 through 9 and 15 through 20 is detachably attached, said printer comprising:

a storage device that stores plural pieces of specific information, wherein the plural pieces of specific information comprises information relating to a quantity of ink kept in said ink cartridge; and

a writing unit that writes the ink quantity-relating information into the ink quantity information storage area of said ink cartridge, preferentially over the other pieces of specific information.

72. (Once Amended) A storage device mounted on an ink cartridge, which is configured to be detachably attached to a printer, said storage device comprising:

an address counter that outputs a count in response to a clock signal output from said printer; and

a storage element that is sequentially accessed based on the count output from said address counter and has a storage area, in which plural pieces of specific information are stored in a readable, writable, and non-volatile manner.

73. (Once Amended) A storage device in accordance with claim 72, wherein the storage area has a first storage area and a second storage area, wherein the first storage area stores a plurality of read only information, and wherein the second storage area is arranged at a place accessed [located] prior to the first storage area and stores information relating to a quantity of ink kept in said ink cartridge.

78. (Once Amended) A storage device mounted on an ink cartridge, which is configured to be detachably attached to a printer, said storage device comprising:

a storage element having a plurality of ink quantity information memory divisions and a plurality of write complete information storage areas, and storing specific information in a readable, writable, and non-volatile manner,

wherein the specific information comprises information relating to a quantity of ink kept in said ink cartridge, wherein the plurality of ink quantity information memory divisions stores the ink quantity-relating information, and wherein the plurality of write complete information storage areas respectively correspond to the plurality of ink quantity information memory divisions and in each of which write complete information is registered when a writing operation into the corresponding ink quantity information memory division is completed.